

Appendix C

Wildlife Information Sources

Terrestrial and Freshwater Species

Multiple Species Groups

- Conservation Planning Program—California Department of Fish and Game
<http://www.dfg.ca.gov/hcpb/conplan/conplan.shtml>
Information about Natural Community Conservation Planning, federal Habitat Conservation Planning, and conservation and mitigation banking.
- Recovery and Delisting of Federal Endangered Species
<http://endangered.fws.gov/recovery/index.html>
Information about federally listed endangered species, including online recovery plans; Endangered Species Act-related conservation tools, laws and policies; and Federal Register notices.
- California Plants and Animals
<http://www.dfg.ca.gov/hcpb/species/species.shtml>
General plant and animal information, lists of special species (threatened and endangered, species of concern, etc.), life history and conservation status information, survey standards and guidelines, threats to species, and photographs.
- California Wildlife Habitat Relationships—California Department of Fish and Game
<http://www.dfg.ca.gov/bdb/html/cwhr.html>
A state-of-the-art information system for California's wildlife that provides information on life history, management, and habitat relationships for 675 species of amphibians, reptiles, birds, and mammals known to occur in the state.

- California Natural Diversity Database—California Department of Fish and Game
<http://www.dfg.ca.gov/bdb/html/cnddb.html>
The most comprehensive statewide inventory of locational records of California's most-imperiled species and natural communities.
- UC Berkeley Museum of Vertebrate Zoology
<http://mvz.berkeley.edu>
A university research and education center for the biology of amphibians, reptiles, birds, and mammals. Site provides online data about specimen locations, information about the museum's collections and research activities, and links to other biological databases and specimen collections.
- CalPhotos: Animals
<http://calphotos.berkeley.edu/>
More than 30,000 online images of California animals.

Bird-specific

- North American Bird Conservation Initiative
<http://www.nabci-us.org/nabci.html>
A continental conservation effort to integrate bird conservation efforts. Site provides online access to existing bird conservation plans, habitat joint ventures, priorities of individual initiatives and programs, species-specific information (assessments, life history, useful identification tips, species lists, population and habitat data), monitoring programs, and mapping tools supporting bird conservation.
- Habitat Joint Ventures in the United States
<http://www.nabci-us.org/jvmap.html>
Directory to the five California Joint Ventures (Central Valley, Intermountain West, Pacific Coast, San Francisco Bay, and Sonoran).
- California Riparian Habitat Joint Venture—Partners in Flight
<http://www.prbo.org/calpif/htmldocs/rhjb>
A collaborative effort by 18 federal, state, and private organizations to protect and enhance habitats for native landbirds throughout California. Site provides access to the California Riparian Conservation Plan.
- Southern Pacific Shorebird Conservation Plan—Partners in Flight
<http://www.prbo.org/cms/index.php?mid=212&module=browse>
A conservation plan that describes species and habitat priorities and goals, threats, recommendations for management, monitoring, research, and education.
- Landbird Conservation Plans—Partners in Flight
<http://www.prbo.org/cms/index.php?mid=3&module=browse>
California-specific plans for bird habitat in coniferous forest, coastal scrub, grassland, oak woodland, shrubsteppe and Sierra Nevada.

- Important Bird Areas of California—Audubon California
<http://ca.audubon.org/IBA.htm>
 Information about 150 key areas in California that are most important to birds. Coordinated within the state by Audubon California, this program is part of a worldwide effort coordinated by BirdLife International to identify and protect sites deemed most critical to birds.
- California's Wildlife—Birds
<http://www.dfg.ca.gov/bdb/html/lifehistbirds.html>
 Life history descriptions for all native California birds.
- ORNIS (ORNithological Information System)
<http://ornisnet.org>
 A collaborative network of databases from ornithological collections in 32 North American natural history museums.

Mammal-specific

- California's Wildlife—Mammals
<http://www.dfg.ca.gov/bdb/html/lifehistmammal.html>
 Life history descriptions for all native California mammals.
- Mammal Species of Special Concern
<http://www.dfg.ca.gov/hcpb/species/ssc/sscmamml/sscmamml.shtml>
 Department of Fish and Game publication *Mammalian Species of Special Concern in California*, by D.F. Williams, 1986. The list of mammalian species of special concern is currently undergoing review. An updated listing and status accounts is expected in 2006.
- Bat Conservation International
<http://www.batcon.org/>
 An organization with the mission to protect and restore bats and their habitats worldwide.
- Western Bat Working Group (WBWG)
<http://www.wbwg.org/wbwg.htm/>
 A partner in the Coalition of North American Bat Working Groups. The WBWG comprises agencies, organizations, and individuals interested in bat research, management, and conservation from 13 western states and the provinces of British Columbia and Alberta.
- Mammal Networked Information System
<http://elib.cs.berkeley.edu/manis>
 A collaborative network of databases from mammal collections in natural history museums, with approximately 10,300 California specimens from 17 institutions.

Reptile- and Amphibian-specific

- California's Wildlife—Amphibians
<http://www.dfg.ca.gov/bdb/html/amphibians.html>
 Life history descriptions for all native California amphibians.

- California's Wildlife—Reptiles
<http://www.dfg.ca.gov/bdb/html/reptiles.html>
Life history descriptions for all native California reptiles.
- Amphibian Species of Special Concern
<http://www.dfg.ca.gov/hcpb/species/ssc/sscamphb/sscamphib.shtml>
Species accounts from Jennings and Hayes, *Amphibian and Reptile Species of Special Concern in California*, 1994.
- Reptile Species of Special Concern
<http://www.dfg.ca.gov/hcpb/species/ssc/sscreptl/sscreptl.shtml>
Species accounts from Jennings and Hayes, *Amphibian and Reptile Species of Special Concern in California*, 1994.
- Partners in Amphibian and Reptile Conservation—Southwest
<http://www.parcplace.org/southwest.html>
A partnership dedicated to the conservation of the herpetofauna—reptiles and amphibians—and their habitats. Membership includes state and federal agencies, conservation organizations, museums, pet trade industry, nature centers, zoos, energy industry, universities, herpetological organizations, research laboratories, forest industries, and environmental consultants.
- HerpNet
<http://www.herpNet.org>
A collaborative network of databases from herpetological collections in natural history museums, with approximately 8,900 California specimens from 13 institutions.

Inland Fish-specific

- Ecosystem Restoration Program—California Bay Delta Authority
<http://calwater.ca.gov/Programs/EcosystemRestoration/Ecosystem.shtml>
A joint state-federal effort to initiate and coordinate ecosystem restoration actions for the San Francisco Bay and Sacramento–San Joaquin river system.
- Native Anadromous Fish and Watershed Branch—California Department of Fish and Game
<http://www.dfg.ca.gov/nafw/index.html>
A program that addresses the health of the state's anadromous fisheries and watersheds. Site provides information on life history, conservation plans, restoration activities and funding, and listing status of species.
- Southwest Region—National Marine Fisheries Service
<http://swr.nmfs.noaa.gov>
A program that addresses the management, regulation, harvesting, conservation, and protection of California's marine resources, including marine fish, invertebrates, and anadromous fish.
- Fish Species of Special Concern
<http://www.dfg.ca.gov/hcpb/species/ssc/sscfish/sscfish.shtml>
Department of Fish and Game publication *Fish Species of Special Concern in California*, second edition, by P.B. Moyle, R.M. Yoshiyama, J.E. Williams, and E.D. Wikramanayake, 1995.

- CalFish
<http://www.calfish.org>
 Online access to California fish and aquatic habitat data, including population trends and counts, distributions, migration barriers, hatcheries, habitat restoration projects, genetics, and monitoring.
- FishNet
<http://speciesanalyst.net/fishnet/default.html>
 A collaborative network of databases from fish collections in 29 natural history museums.

Inland Invertebrate-specific

- Department of Entomology—California Academy of Sciences
<http://www.calacademy.org/research/entomology>
 One of the largest arthropod specimen collections in North America.
- Essig Museum of Entomology—University of California, Berkeley
<http://essig.berkeley.edu/pages/about.htm>
 Probably the largest existing specimen collection of California insects.

Plants

- California Native Plant Society
<http://www.cnps.org>
 A statewide nonprofit organization focused on California's native plants. Site provides online "Inventory of Rare and Endangered Plants" and information about conservation programs, legislative updates, education, science programs, and related publications.
- Jepson Herbarium—University of California, Berkeley
<http://ucjeps.berkeley.edu>
 The only herbarium devoted exclusively to the study of California's native plants. Site provides access to a database of text data and images for over 300,000 California plant specimens.
- The Jepson Manual
http://ucjeps.berkeley.edu/interchange/I_treat_indexes.html
 The most comprehensive identification guide to nearly 8,000 taxa of native and naturalized California plants. Site provides access to species descriptions and keys to identification.
- CalPhotos: Plants
<http://elib.cs.berkeley.edu/photos/flora>
 Approximately 42,000 online images of California plants.

Plant Communities

- Natural Resource Management Program—California State Parks
http://www.parks.ca.gov/default.asp?page_id=22197
 A program to protect, restore, and maintain natural diversity on state park lands, with special units for prescribed fire, exotic species control, sensitive species management, and biological monitoring.

- California Land Cover Mapping and Monitoring Program. Fire and Resource Assessment Program (FRAP) of the Department of Forestry and Fire Protection.
http://frap.cdf.ca.gov/projects/land_cover/index.html
The Fire and Resource Assessment Program (FRAP) of the California Department of Forestry and Fire Protection and the USDA Forest Service coordinate land cover mapping and monitoring within California. Remotely sensed data and GIS (geographic information systems) are used to accomplish the program objectives. This program generates data that describe the extent and condition of various land cover types and the magnitude and cause (e.g. urbanization, natural succession, wildfire, and timber harvest) of land cover changes.
- U.S. Forest Service Research Natural Areas in California
http://www.fs.fed.us/psw/publications/documents/psw_gtr188/gtr188index.html
Descriptions of special areas on national forest land that represent both widespread and unique ecosystems and that are protected to maintain biological diversity and provide ecological baseline information, education, and research.
- Natural Reserve System—University of California
<http://nrs.ucop.edu>
The world's largest university-operated system of natural reserves. It broadly represents California's rich ecological diversity and provides relatively undisturbed samples of the state's natural ecosystems and the facilities needed to support teaching and research.
- A Manual of California Vegetation
<http://davisherb.ucdavis.edu/CNPSActiveServer/index.html>
Descriptions and images of 275 vegetation series in California.
- California Wildlife Habitats—California Department of Fish and Game
http://www.dfg.ca.gov/bdb/html/wildlife_habitats.html
Descriptions of the major wildlife habitats in California.
- Vegetation Classification and Mapping Program—California Department of Fish and Game
<http://www.dfg.ca.gov/bdb/html/vegcamp.html>
Program to facilitate and oversee efforts to develop accurate and scientifically defensible maps and classifications of vegetation and/or habitat throughout the state. Site provides links to other programs and activities related to California vegetation science.
- Vegetation Program—California Native Plant Society
<http://www.cnps.org/programs/vegetation/index.htm>
Program to coordinate CNPS involvement in improving classification and mapping of California's natural vegetation.
- CalPhotos: Landscapes and Habitats
<http://elib.cs.berkeley.edu/photos/landscape>
Approximately 2,400 online images of California landscapes and habitats.
- Ecological Subregions of California
<http://www.fs.fed.us/r5/projects/ecoregions>
Biophysical descriptions of all 220 geographical sections of the state, each approximately 450,000 acres in size. Descriptions include climate, lithology and stratigraphy, geomorphology, soils,

surface water characteristics, vegetation, characteristic fauna, disturbance regimes, land use, and cultural ecology.

- California Biodiversity Council Vegetation Mapping Memorandum of Understanding
<http://www.ceres.ca.gov/biodiversity/vegrou.html>
 A cooperative vegetation and habitat mapping initiative which will facilitate statewide joint data collection and processing, establish common mapping and classification standards across all ownerships, and provide timely response to both state and federal information and analytical requirements.

Marine Species

Multiple Species Groups

- California Current Joint Venture
<http://www.prbo.org/cms/index.php?mid=231&module=browse>
 An ecosystem-level conservation plan that will define a conservation agenda for the California Current System (CCS), focusing on top predators (including but not limited to seabirds), and their prey.
- Marine Life Protection Act Initiative
<http://www.dfg.ca.gov/mrd/mlpa/index.html>
 A cooperative public-private partnership to expand, fund, and manage a system of marine protected areas along the California coast. Site provides MLPA formal documents, species information, and information about scientific activities, public outreach, and existing marine protected areas.
- Priority Conservation Areas—Baja California to the Bering Sea (B2B) Project
<http://www.mcbl.org/marineprotected/Marine.htm#PCA>
 Report describing critical marine habitat areas along the Pacific Coast. Prepared by the Marine Conservation Biology Institute as part of the Commission for Environmental Cooperation's North American Marine Protected Area Network.
- Ocean Resources Management Program—California Resources Agency
<http://resources.ca.gov/ocean/index.html>
 Statewide program to ensure comprehensive and coordinated management, conservation, and enhancement of California's ocean resources.
- Marine Region—California Department of Fish and Game
<http://www.dfg.ca.gov/mrd>
 Program to address marine biodiversity issues along California's coast. Site provides information about marine life management, regulations and enforcements, permits, and reports on identification, biology, and conservation of marine life.
- California Ocean and Coastal Environmental Access Network
<http://ceres.ca.gov/ocean>
 A Web-based virtual library for the discovery of and access to data, information, and tools to support ocean and coastal resource management, planning, research, and education. Cal OCEAN is a project of the California Resources Agency's Ocean Resources Management Program.

- Southwest Fisheries Science Center—NOAA Fisheries
http://swfsc.nmfs.noaa.gov/gen_info.htm
One of six regional NOAA fisheries research centers. The Center conducts fisheries and marine mammal research at three laboratories in California in support of the Pacific Fishery Management Council.
- Marine Conservation Biology Institute
<http://www.mcbi.org/index.html>
A nonprofit scientific and conservation advocacy organization to protect and restore marine life on the West Coast and other coasts using scientific research and training, integrating science and policy, conducting policy research, educating the public, and building partnerships to solve problems affecting marine life and people.
- California's Living Marine Resources: A Status Report
<http://www.dfg.ca.gov/mrd/status/index.html>
Descriptions of marine ecosystem, including stressors, regulations, human activities in marine ecosystem, and marine law enforcement. Species-specific descriptions (history of fishery, status of scientific knowledge) for marine and estuarine invertebrates, fish, birds, mammals, plants and habitats.

Marine Birds

- Southern Pacific Shorebird Conservation Plan
<http://www.prbo.org/cms/index.php?mid=212&module=browse>
A conservation plan to guide the provision of adequate, high-quality shorebird habitat to restore and maintain California's shorebird populations.
- California Current Marine Bird Conservation Plan
<http://www.prbo.org/cms/index.php?mid=66&module=browse>
A conservation plan that addresses seabird conservation from an ecosystem perspective, synthesizing information on multiple species, multiple habitats, ecological interactions, and the issues and threats that affect the health of seabirds, their prey, and their ocean environments.
- Seabird Conservation Plan—U.S. Fish and Wildlife Service
http://migratorybirds.pacific.fws.gov/Seabird_Conservation_Plan_Document_pdf_files.htm
A plan that identifies the USFWS priorities for seabird management, monitoring, outreach, planning, and coordination. It provides profiles of each species (population size and status, ecology, habitats, threats, and recommended conservation actions), and a summary of current management, monitoring, and outreach efforts.

Marine Mammals

- U.S. Pacific Marine Mammal Stock Assessment Reports—NOAA Fisheries
<http://swfsc.nmfs.noaa.gov/PRD/PROGRAMS/CMMP/default.htm>
Information about the distribution, abundance, population trends, human-caused mortality, and the potential biological removal (PBR) of each stock.

- Coastal Marine Mammal Program—NOAA Fisheries
<http://swfsc.nmfs.noaa.gov/PRD/PROGRAMS/CMMP/default.htm>
Program that tracks the abundance and distribution of marine mammals on the U.S. West Coast out to 300 nautical miles.
- Southwest Fisheries Science Center—NOAA Fisheries
<http://swfsc.nmfs.noaa.gov/PRD>
Program that conducts applied research on the cetaceans, pinnipeds, and sea turtles of the eastern Pacific Ocean.
- Marine Mammals—NOAA Fisheries
<http://www.nmfs.noaa.gov/pr/species/mammals>
Information about marine mammal legal status information, wildlife viewing guidelines, and congressional reports.

Marine Nearshore Fish

- Coastal Pelagic Species Fishery Management Plan—Pacific Fishery Management Council
<http://www.pcouncil.org/cps/cpsfmp.html>
Plan that describes management and research actions and harvest policies for the entire coastal pelagic species fishery along the U.S. West Coast, including Pacific sardine, Pacific mackerel, market squid, and northern anchovy.
- Nearshore Fishery Management Plan—California Department of Fish and Game
<http://www.dfg.ca.gov/mrd/nfmp/index.html>
Management plan for nearshore fisheries on the California coast, including life history, status of harvesting, management measures, research needs, and implementation actions.
- Pacific Coast Salmon Plan—Pacific Fishery Management Council
<http://www.pcouncil.org/salmon/salfmp/fmpthru14.pdf>
Plan provides information about management objectives, harvest goals, and data needs for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California.
- Pacific Fishery Management Council
<http://www.pcouncil.org>
One of eight U.S. regional fishery management councils, with responsibility for fisheries off the coasts of California, Oregon, and Washington. Site provides information about Council activities, marine reserves, research and data needs, regulatory information and species-specific info such as management plans, assessment reports, and life history. Fisheries include ground fish, salmon, highly migratory species, coastal pelagic species, and halibut.
- Southwest Region—National Marine Fisheries Service
<http://swr.nmfs.noaa.gov>
Information concerning the management, regulation, harvesting, conservation, and protection of California's marine resources, including marine fish, invertebrates, and anadromous fish.

Marine Invertebrates

- Marine Invertebrates and Plants—NOAA Fisheries
<http://www.nmfs.noaa.gov/pr/species/invertebrates>
Information about marine invertebrates and plants listed, candidates for listing, or species of concern under the Endangered Species Act.
- Life History Information for Selected California Marine Invertebrates and Plants
http://www.dfg.ca.gov/mrd/table_inv_ip.html
A table with distribution, habitat, life history, and dispersal information for various species of California marine invertebrates.
- San Francisco Bay Marine Invertebrates Bibliography
http://www.calacademy.org/research/library/biodiv/biblio/sf_marine_invert.htm
Online summary from California Academy of Sciences of Internet links, books, and articles on marine invertebrates in San Francisco Bay and on the California coast.
- California Abalone Recovery and Management Plan
<http://www.dfg.ca.gov/mrd/armp/index.html>
A plan for all abalone species in California, including the recovery of depleted populations in Southern California and the management of the Northern California populations.